



Focus

Plastics-Recycling by the Numbers

Overview

Because plastics are light, durable, useful and microwavable they have become a popular material found in our waste stream. To help you recycle plastics, the plastic industry developed a coding system to identify the various types of resins used to make household containers and bags. These codes, located on the bottom or side of the container, show a number within the recycling arrow symbol.

In the case of plastics, the symbol does not necessarily mean that the plastic can be recycled in your area. The number will tell you the type of resin the plastic is made from.

What Do the Numbers Mean?

You will commonly find seven different numbers. (The following product examples are not standard. Different manufacturers may in fact use different plastic resins for the same products.)

1-PET: Polyethylene Terephthalate

Includes beverage bottles (like 2-liter pop bottles) and some microwave food trays.

2-HDPE: High Density Polyethylene

Includes milk jugs, trash bags, detergent bottles, bleach bottles, aspirin bottles.

3-V: Vinyl/Polyvinyl Chloride (PVC)

Includes food wrap, vegetable oil bottles, and blister wrap.

4-LDPE: Low Density Polyethylene

Includes some grocery and department store shopping bags, produce and bread bags, and food wrap.

5-PP: Polypropylene

Includes some yogurt containers, some shampoo bottles, and some margarine tubs.

6-PS: Polystyrene

Includes hot beverage cups, clamshell containers for take-out food, egg cartons, and meat trays.

7-Other

Includes plastics other than the six most common, or containers made of multiple layered resins or blends. Includes water cooler bottles, snack bags, and condiment bottles.

Why Do Plastics Have to Be Separated?

Plastics need to be cleaned and sorted to keep their value and increase the number of products they can be made from them. This decreases contamination and ultimately results in a higher-grade commodity. Make sure you rinse all plastics and remove caps before recycling.

Why Do Some Recyclers Collect Only Certain Forms of Plastic?

Containers made of the same resin sometimes contain different additives resulting in physically different plastics. For example, milk jugs and trash bags can both be made of HDPE. However, one additive makes the milk jug rigid and another makes the trash bag flexible. Due to the differences in additives, the two HDPE products must be processed separately if the high value of the material is to be retained. Even though these are both HDPE, a recycler may collect only one type.

The types of plastics collected by recyclers also depend on the markets available for those plastics. At this time markets for used plastics are not as established as those for paper, glass, and aluminum. However, markets are always changing and manufacturers are continually looking for ways to recycle plastics.

Ways in Which Plastic Containers and Bags Can Be Used

- Reuse bags or donate to food banks and thrift stores.
- Use plastic six-pack rings in art projects at daycare centers, nursery schools, etc.
- Use as storage containers.
- Create miniature greenhouses out of milk jugs.
- Construct bird feeders out of plastic milk jugs.

For More Information

To find out what types of plastic are being accepted for recycling in your area call: 1-800-RECYCLE or visit us on the web at www.1800recycle.wa.gov

Ecology is an equal-opportunity agency. If you have special accommodation needs, contact Michelle Payne at (360) 407-6129 (Voice) or (360) 407-6006 (TDD).